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1 **What Is Claimed Is:**

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3 1. A satellite system operating over a land
4 mass comprising:

5 a first satellite generating a first
6 plurality of spot beams directed at said land mass,
7 said first set of spot beams partially covering said
8 land mass;

9 a second satellite generating a second
10 plurality of spot beams;

11 said first plurality of spot beams and said
12 second plurality of spot beams in combination provide
13 substantially ubiquitous coverage over the land mass.

1 2. A satellite system as recited in claim
2 1 wherein said first satellite and said second
3 satellite are selected from the group consisting of a
4 MEO, a GEO, and an IGSO.

1 3. A satellite system as recited in claim
2 1 wherein said spot beams are V band.

1 4. A satellite system as recited in claim
2 1 wherein said spot beams are K band.

1 5. A satellite system as recited in claim
2 1 wherein said first plurality of spot beams comprise
3 a plurality of reconfigurable spot beams.

1 6. A satellite system as recited in claim
2 1 wherein said plurality of reconfigurable spot beams

3 comprises a first spot beam directed at a first area
4 and a second spot beam directed substantially to said
5 first area.

1 7. A satellite system as recited in claim
2 1 wherein at least one of said plurality of spot beams
3 having a plurality of beam portions.

1 8. A satellite system as recited in claim
2 1 wherein said at least one of said plurality of beam
3 portions being independently adjustable in response to
4 a condition.

1 9. A satellite system as recited in claim
2 8 wherein said condition is rain.

1 10. A satellite system as recited in claim
2 8 wherein said condition is heavy traffic routed
3 through said satellite.

1 11. A portable antenna assembly for
2 communicating with a satellite comprising:
3 a connector;
4 a transmission wire coupled to said
5 connector; and
6 an antenna element coupled to said
7 transmission wire, said antenna element sending and
8 receiving signals from said satellite.

1 12. A portable antenna assembly as recited
2 in claim 11 wherein said antenna element comprises a
3 parabolic dish.

1 13. A portable antenna assembly as recited
2 in claim 11 wherein said antenna element comprises a
3 phased array.

1 14. A portable antenna assembly as recited
2 in claim 11 wherein said antenna element generates a
3 mechanically steered electronically shaped beam.

1 15. A portable antenna assembly as recited
2 in claim 11 further comprising a motor coupled to said
3 antenna element.

1 16. A portable antenna assembly as recited
2 in claim 15 further comprising an antenna controller
3 coupled to said motor for controlling a position of
4 said antenna element through said motor.

1 17. A system for communicating with a
2 satellite comprising:
3 an electronic device having a communications
4 port; and
5 a portable satellite antenna coupled to said
6 communications port for coupling said electronic
7 device directly to a satellite.

1 18. A system as recited in claim 17 wherein
2 said electronic device has an antenna controller
3 coupled to said electronic device.

1 19. A system as recited in claim 17 wherein
2 said electronic device comprises a laptop computer.

1 20. A system as recited in claim 17 wherein
2 said electronic device comprises a computer in an
3 automotive vehicle.

1 21. A system as recited in claim 19 wherein
2 said automotive vehicle is one from the group
3 consisting of an airplane, a car, a boat, and a train.

1 22. A switch for use in a satellite system
2 comprising:
3 a receiver for receiving a signal from a
4 beam of a signal source;
5 a beam router;
6 a controller coupled to said receiver, said
7 controller directing the signal to said beam router,
8 said controller controlling the operation of the beam
9 router; and
10 a bent pipe repeater coupled to said router,
11 said bent pipe repeater directing the signal back to
12 the beam; and
13 a digital packet switch coupled to said
14 controller to direct the signal to a second beam.

1 23. A switch as recited in claim 22 wherein
2 said signal source is a terrestrial system.

1 24. A switch as recited in claim 22 wherein
2 said signal source is another satellite.

1 25. A switch as recited in claim 22 wherein
2 said digital packet switch comprises a demodulator.

1 26. A switch as recited in claim 22 wherein
2 said digital packet switch comprises an instruction
3 reader for reading an instruction.

1 27. A switch as recited in claim 22 further
2 comprising a look up table, said look-up table
3 providing a routing instruction to said controller.

1 28. A switch as recited in claim 22 wherein
2 said digital packet switch comprises a beam router for
3 routing the beam.

1 29. A switch as recited in claim 22 wherein
2 said digital packet switch comprises a remodulator.

1 30. A switch as recited in claim 22 wherein
2 said bent pipe comprises a carrier frequency shifter.
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